CLAIMS

1. A computer system, comprising:

a local area network (LAN);

a plurality of computers, each of the computers comprising at least one central processing unit (CPU) and a LAN interface, which is coupled to communicate over the LAN, while the computers comprise no on-board user interface controllers; and

a console, which comprises user input and output devices and is coupled to communicate over the LAN so as to convey an input received via the user input device over the LAN to each of the computers, and to receive an output generated by each of the computers over the LAN for display using the user output device.

2. The system according to claim 1, wherein the computers and the console are arranged to communicate over the LAN by transmitting Layer 2 data frames.

3. The system according to claim 2, wherein the computers and the console are arranged to convey the input and the output by tunneling over Layer 2 on the LAN.

4. The system according to claim 2, wherein the computers and the console are arranged to encapsulate the input and output in Internet Protocol (IP) packets for transmission over the LAN.

5. The system according to claim 2, wherein the computers and the console are arranged to encapsulate the input and output using an application-layer protocol.

6. The system according to claim 1, and further comprising an input/output (I/O) device, coupled to the LAN, and wherein the computers are arranged to transmit I/O commands over the LAN to the I/O device and comprise no on-board I/O device controllers.

7. The system according to claim 6, wherein each of the computers comprises an emulation processor, which is coupled to trap the I/O commands from the at least one CPU while emulating the I/O device, and to encapsulate the I/O commands in data frames for transmission over the LAN to the I/O device, so as to cause the I/O device to fulfill the commands.

8. Computer apparatus, comprising:

a central processing unit (CPU);

a system controller, coupled to the CPU and arranged to generate input/output (I/O) commands for transmission over a bus to an I/O device;

a network interface, which is arranged to be coupled to a local area network (LAN); and

an emulation processor, which is coupled to the system controller and to the network interface, and is arranged to trap the I/O commands from the system controller while emulating the I/O device, and to encapsulate the I/O commands in data frames for

transmission via the network interface over the LAN to the I/O device, so as to cause the I/O device to fulfill the commands.

9. The apparatus according to claim 8, wherein the emulation processor is arranged to encapsulate the I/O commands in Ethernet frames.

10. The apparatus according to claim 8, wherein the emulation processor is arranged to encapsulate the I/O commands in Internet Protocol (IP) packets.

11. The apparatus according to claim 8, wherein the emulation processor is arranged to encapsulate the I/O commands using an application-layer protocol.

12. The apparatus according to claim 8, wherein the apparatus comprises substantially no on-board device controllers other than the network interface and the emulation processor.

13. An emulation device, comprising:

trap logic, which is arranged to be coupled to a computer system controller so as to trap input/output (I/O) commands directed by the system controller to an I/O device, while emulating the I/O device; and

a service processor, which is arranged to encapsulate the trapped I/O commands in data frames for transmission over a local area network (LAN) to the I/O

device, so as to cause the I/O device to fulfill the commands.

14. The device according to claim 13, wherein the service processor is arranged to encapsulate the I/O commands in Ethernet frames.

15. The device according to claim 13, wherein the service processor is arranged to encapsulate the I/O commands in Internet Protocol (IP) packets.

16. The device according to claim 13, wherein the service processor is arranged to encapsulate the I/O commands using an application-layer protocol.

17. A method for computing, comprising:

coupling a plurality of computers to communicate over a local area network (LAN), the computers comprising no on-board user interface controllers; and

coupling a console, which comprises user input and output devices, to communicate over the LAN so as to convey an input received via the user input device over the LAN to each of the computers; and

receiving an output generated by each of the computers over the LAN for display using the user output device.

18. The method according to claim 17, wherein coupling the computers and the console comprises arranging the

computers and the console to communicate over the LAN with the console by transmitting Layer 2 data frames.

19. The method according to claim 18, wherein the computers and the console are arranged to convey the input and the output by tunneling over Layer 2 on the LAN.

20. The method according to claim 18, wherein the computers and the console are arranged to encapsulate the input and output in Internet Protocol (IP) packets for transmission over the LAN.

21. The method according to claim 18, wherein the computers and the console are arranged to encapsulate the input and output using an application-layer protocol.

22. The method according to claim 17, and further comprising coupling an input/output (I/O) device to the LAN, and arranging the computers to transmit I/O commands over the LAN to the I/O device, wherein the computers comprise no on-board I/O device controllers.

23. The method according to claim 22, wherein arranging the computers to transmit I/O commands over the LAN comprises trapping the I/O commands while emulating the I/O device, using an emulation device in each of the computers, and encapsulating the I/O commands in data

frames for transmission over the LAN to the I/O device, so as to cause the I/O device to fulfill the commands.

24. A computer system, comprising:

a local area network (LAN);

a plurality of computers, each of the computers comprising at least one central processing unit (CPU) and a LAN interface, which is coupled to communicate over the LAN, while the computers comprise no on-board input/output (I/O) device controllers other than the LAN interface; and

one or more peripheral devices, coupled to communicate with the computers over the LAN.

25. The system according to claim 24, wherein the computers and the peripheral devices are arranged to communicate over the LAN by transmitting Layer 2 data frames.

26. The system according to claim 25, wherein the computers and the peripheral devices are arranged to communicate by tunneling over Layer 2 on the LAN.

27. The system according to claim 25, wherein the computers and the peripheral devices are arranged to communicate by encapsulating I/O commands in Internet Protocol (IP) packets for transmission over the LAN.

28. The system according to claim 25, wherein the computers and the peripheral devices are arranged to communicate by encapsulating I/O commands using an application-layer protocol.

29. The system according to claim 25, wherein the Layer 2 data frames are Ethernet frames.

30. The system according to claim 24, wherein the at least one CPU of each of the computers is arranged to generate I/O commands for controlling at least one of the peripheral devices, and wherein each of the computers comprises an emulation processor, which is coupled to trap the I/O commands from the at least one CPU while emulating the at least one of the peripheral devices, and to encapsulate the I/O commands in data frames for transmission over the LAN to the at least one of the peripheral devices, so as to cause the at least one of the peripheral devices to fulfill the commands.

31. A method for computing, comprising:

coupling a plurality of computers to communicate over a local area network (LAN) via respective LAN interfaces, the computers comprising no on-board input/output (I/O) device controllers other than the LAN interfaces; and

coupling one or more peripheral devices to communicate with the computers over the LAN; and

controlling the peripheral devices by transmitting I/O commands over the LAN from the computers to the peripheral devices.

32. The method according to claim 31, wherein controlling the peripheral devices comprises transmitting Layer 2 data frames over the LAN.

33. The method according to claim 33, wherein transmitting the Layer 2 data frames comprises conveying the I/O commands by tunneling over Layer 2 on the LAN.

34. The method according to claim 33, wherein transmitting the Layer 2 data frames comprises conveying the I/O commands by encapsulating the I/O commands in Internet Protocol (IP) packets for transmission over the LAN.

35. The method according to claim 33, wherein transmitting the Layer 2 data frames comprises conveying the I/O commands by encapsulating the I/O commands using an application-layer protocol.

36. The method according to claim 33, wherein transmitting the Layer 2 data frames comprises transmitting Ethernet frames.

37. The method according to claim 32, wherein each of the computers comprises at least one CPU, which is arranged to generate the I/O commands, and wherein controlling the peripheral devices comprises trapping the I/O commands while emulating the at least one of the peripheral devices, using an emulation device in each of the computers, and encapsulating the I/O commands in data frames for transmission over the LAN to the at least one of the peripheral devices, so as to cause the at least one of the peripheral devices to fulfill the commands.